

From the World Health Organisation



Tobacco: a global emergency

Epidemiology is often referred to as the cornerstone of public health. It is the science of data collection and risk assessment which underlies, or should underlie, the public health policy process. The need for reliable, timely data on the health situation is clear, but in practice, data collection and disease monitoring are not straightforward and can be expensive. Reliable mortality data are only available for about one third of the world's population, although for many other countries good community level information is available to permit estimates of the disease pattern to be made. Recently, the World Health Organisation (WHO) and the World Bank collaborated on a study to assess the global burden of disease and the results, for developing countries at least, were quite surprising.

About 12-13 million young children still die each year from the major childhood infectious diseases such as diarrhoeal disease, acute respiratory infections, malaria, and vaccine-preventable diseases. While continued and intensified efforts to reduce this tragic toll of young lives must remain the priority for international public health, very many countries, of which Indonesia is a good example, have succeeded in dramatically reducing infant and child mortality, and there is every reason to believe that these improvements in child survival will continue. Indeed, taking all developing countries combined, the WHO/World Bank study found that there are now *more* deaths from non-communicable diseases (19 million) than from all infectious diseases combined (17 million). With further progress against infectious diseases, the importance of chronic diseases such as cancer, heart disease, stroke, and emphysema can only be expected to increase.

But what is the urgency of tobacco control when tobacco cannot yet be a major cause of death in most developing countries? This is a major source of misunderstanding and no doubt the reason why many governments are reluctant to take action *now* to control the tobacco epidemic. Experience from several industrialised countries confirms that there is a long delay (typically two to three decades) between the time when a new generation of youth begin to smoke and when the full health effects of their smoking are felt.¹ We suspect, but do not know, that the health hazards of smoking in the developing world will be similar to what has been seen in Europe, America, and other developed countries.

And what are those risks? With prolonged smoking, recent data suggest that smokers have a *three times* higher death rate at all ages, beginning at about 35 years of age, than do lifelong non-smokers. If the death rate for

smokers is three times higher than for non-smokers, then at least half of all smokers will eventually die from smoking. And they will not just die in old age. This is a myth. Epidemiological studies confirm that half of the smokers who are killed by cigarettes die in middle age, and each of these smokers loses, on average, about 25 years of life expectancy. Most smoking attributable deaths occur from heart disease, stroke, chronic bronchitis, emphysema, and cancer, especially lung cancer. If one smokes long enough, one's risk of dying from lung cancer is 25 times higher than for lifelong non-smokers.

But, one may argue, what is the relevance of deaths in the future for public health policy today? Certainly relatively few deaths in less developed countries are *currently* attributable to smoking because men have not been smoking long enough yet to incur these staggering health risks. Rather, the urgency arises from the extremely high proportion of young men who now smoke (about one in two). If these smoking trends continue, and if the eventual hazards of tobacco are comparable with those observed in developed countries, then of the two billion children and teenagers aged 0-19 alive today in less developed countries, about 600-700 million will eventually become regular smokers, and of these, about 200-300 million will eventually die from smoking, half of them in middle age.

This is a public health catastrophe that developing countries must surely wish to avoid. It is inconsistent public health policy to save young lives from infectious diseases only to see many of these children die in adulthood from a totally preventable epidemic. To prevent that epidemic, action must be taken *now* drastically to reduce smoking prevalence. If we fail to do so, the seeds will be sown for this massive epidemic of tobacco-related diseases in the next few decades, an epidemic that kills just as effectively in middle age as it does in old age.

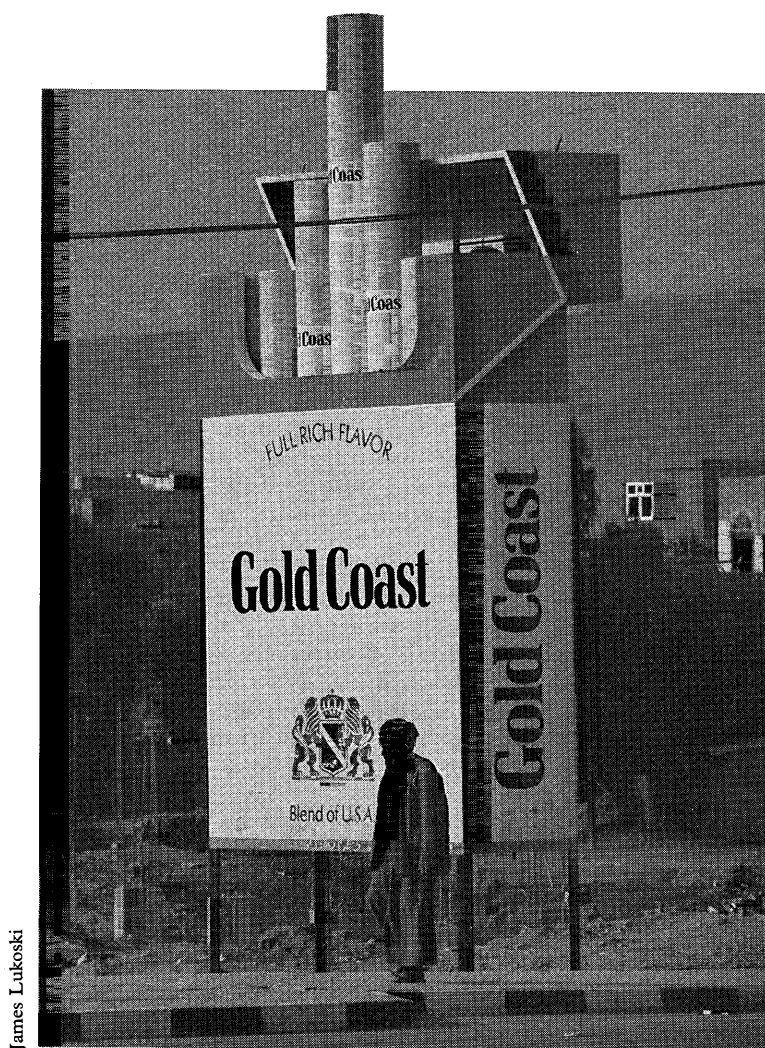
WHO estimates that there are about 1.1 billion smokers in the world today. About 30% of all adults are regular smokers. By the time the youth of today reaches middle age, in the 2020s or early 2030s, the appalling public health consequences of their smoking will become apparent. By then, we predict that the annual death toll from tobacco will have risen from about three million today to 10 million, with seven million of these deaths in developing countries. If current trends continue, the chief uncertainty about this alarming prediction is not *whether* there will be 10 million deaths a year from tobacco, but precisely when, during the early part of the next century, the annual death toll from tobacco will reach 10 million.

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Despite setbacks, we are making global progress in controlling the AIDS epidemic, in reducing tuberculosis infection, and in promoting safe motherhood. But are we making comparable progress against tobacco? The answer must be no. But we can. Most of the world's major cigarette markets are large developing populations such as China, India, and Indonesia. By strengthening tobacco control measures in large populations with serious

potential tobacco epidemics, we can prevent many of the youth of today from becoming smokers, and in doing so, together we can prevent these appalling predictions of the World Bank and WHO from becoming a reality.

¹ Lopez AD, Collishaw NE, Piha T. A descriptive model of the cigarette epidemic in developed countries. *Tobacco Control* 1994; 3: 242-7.



James Lukoski

Gold Coast cigarettes marketed by RJ Reynolds in San'aa, Yemen. Source : Scientific American, May 1995.